



US Army Corps
of Engineers®

Flood&Coastal Storm Damage Reduction R&D Program

Climate Variability Impacts on Corps Projects

Description

Climate is a key driver of water management issues that is especially significant when combined with other drivers of change in supply and demand. U.S. Army Corps of Engineers water managers are not adequately prepared to deal with observed results and future implications. The few USACE Districts responding to these challenges individually have few tools and policies to guide them. Improved USACE knowledge and ability to quantify impacts of climate variation on water supply are required for reservoir reallocation agreements, environmental restoration studies, and water-control projects across the country. This project involves experts from within and outside the Corps to assess the state-of-the-art in climate variability, and identify knowledge gaps that can be filled with USACE research and development.

Benefits

Internal and interagency collaboration will provide a consistent approach to solve USACE knowledge and technology gaps for effective water management and provide technology transfer for USACE Districts facing water supply issues related to climate variability.

Status

The USACE Climate Impact Workshop (November 2004) brought together interagency personnel, climate scientists, climate forecasters, water resources researchers, water managers, water policy developers, and senior managers to discuss the ramifications of climate variability and change on water management. A survey of Western Districts was conducted to identify drivers, impacts, and potential solutions to climate variability impacts. FY07 activities leveraged an existing Reclamation project through workshops in Sacramento, California exploring climate variability impacts to seasonal flood control. This work was leveraged by the Headquarters-funded Western States Watershed Study.

Distribution Source(s)

The technology is in development and is not ready for distribution.

Available Documentation

MFR on Climate Workshop, Conference Papers, Journal Papers, Sacramento Workshop Minutes.

Available Training

Training will be provided as soon as the technology is sufficiently advanced.

Available Support

Support for climate variability impacts to USACE projects will be available as products are developed.

Application

Policy and procedures must be developed before application.

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Partners USACE Institute for Water Resources, USACE Portland, Sacramento, and Seattle Districts; U.S. Bureau of Reclamation, National Weather Service, State of California.